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DOE/EA-1440-S-1- SA-1

SUPPLEMENT ANALYSIS TO THE FINAL SUPPLEMENT TO THE FINAL SITE-WIDE ENVIRONMENTAL ASSESSMENT OF THE NATIONAL RENEWABLE ENERGY LABORATORY'S SOUTH TABLE MOUNTAIN COMPLEX (DOE/EA-1440-S-1)

Proposed Action: Expansion of the Research Support Facility

Recent appropriations resulting from the American Reinvestment and Recovery Act of 2009 have provided additional funding which would allow the acceleration of NREL's planned addition of office space on the South Table Mountain (STM) site. This additional office space would be an expansion of the Research Support Facility (RSF) assessed in *Final Supplement To Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's South Table Mountain Complex* SWEA/SEA-I (DOE/EA-1440-S-1) (hereafter referred to as SEA-I) for which a FONSI was issued in May 2008. The analyses of RSF in SEA-I are herein incorporated by reference.

This Supplement Analysis (SA) has been prepared to assist DOE in determining whether additional NEPA analyses are required.

NEPA Background: In accordance with DOE's NEPA Implementing Regulations [10 CFR 1021.314(a)] DOE shall prepare a supplement to a NEPA document if there are substantial changes to the proposal or significant new circumstances or information relevant to environmental concerns, as discussed in 40 CFR 1502.9(c)(1). When it is unclear whether or not a supplement is required, DOE shall prepare an SA. The SA shall discuss the circumstances that are pertinent to deciding whether to prepare a supplemental NEPA document; prepare a new NEPA document; or whether no further NEPA documentation is required.

RSF as Assessed in DOE/EA-1440-S-1: The RSF assessed in SEA-I was envisioned as an on-site office building or multi-building office complex in Zone 4 and/or the northeast quadrant of Zone 6 that would house up to 800 people. No RSF building was to exceed five stories, or about 75 feet above grade. However, there could be one or more one- to five-story buildings on any or all of the three building pads. The permanent RSF building(s) footprint could cover up to the total area of the three building pads, or approximately 3.5 acres. Additional permanent footprint for walkways, patios, bike

paths, and other new common areas and amenities associated with the RSF could cover up to approximately 100,000 square feet, or about 2.3 additional acres. The final facility footprint could reflect one single RSF building or several buildings. In addition, up to several acres would be used temporarily for building laydown and staging. These areas would be reclaimed and restored after completion of the Proposed Action.

Regardless of the number of buildings that would be constructed, the RSF would provide approximately 220,000 to 300,000 sq. ft. of office and research support space. It would house up to approximately 800 staff currently housed in leased, off-campus offices. In addition to offices, it would include specialty spaces such as meeting and conference rooms, a library, a food service area, fitness areas, and a data center. RSF construction began in 2008.

Collectively, the RSF and infrastructure upgrades would result in the loss of approximately 15 to17acres of grassland and shrubland habitat.

RSF Final Design: After the completion of the SEA- I and the issuance of a FONSI, during final design it was determined that a location spanning pads 2 and 3 and extending further to the west would provide a site that would be more amenable to incorporating the energy efficiency technologies necessary to construct a zero energy building, as well as providing a more visually appealing structure that would blend with the existing topography and landscape.

The RSF that is currently being constructed consists of a north and south wing oriented along an east/west axis with an interconnector, and a support area adjacent to the north wing. The north wing is approx 450' x 60', 4-stories, and 108,000 total sq. ft. The south wing is approx 360' x 60', 3-stories, and 64,800 sq. ft. The interconnector is approx 111' x 45', 3-stories, and 15,000 sq. ft. The 2-story support area is approx 90' x 150' and 27,000 sq. ft. Slightly less than the 220,000 sq. ft. of office space minimum size assessed in the SEA-I and is currently envisioned to house 742 people. Not counting sidewalks and other infrastructure the RSF building footprint will be just less than 1 acre.

Proposed Expansion of RSF:

With the increased funding, RSF would be expanded to a total of 368,000 sq. ft.; ~68,000 more than was assessed in SEA-I and would house around 1250 people; 450 more employees. The RSF expansion would be an additional wing or building added to the RSF capable of supporting approximately 400 to 600 additional staff and would be a LEED Platinum building. It would provide approximately 150,000 sq. ft. of additional office space and likely be either 3 or 4 stories high with a building footprint of approximately 600' x 60' or 36,000 sq ft and additional 15,000 sq. ft. of walkways, patios

and bike paths. The RSF expansion would be configured to match the architecture of the RSF and be located just to the north of the current RSF which is under construction.

The major differences in RSF as assessed in SEA-I, as finally designed post SEA-I, and as proposed for expansion are shown on Table1.

Table 1. Comparison of RSF's Evolving Design

	RSF as Assessed in SEA-I	RSF as currently being built	RSF with Expansion	Magnitude of change from SEA-I
Office Space (sq. ft.)	220,000 to 300,000	218,000	368,000	~68,000 more sq. ft.
Disturbance Footprint (acres)	15-17	6-8	9-11	None
Total Employees	800	742	1,250	450 more employees
Location	Pads 1, 2, or 3	Pads 2 & 3	Pads 2 & 3	None
Building Footprint (acres)	Up to 3.5	Less than 1	Less than 2	None

Change in RSF Impacts:

Because the expansion of RSF would occur within the area of disturbance assessed in SEA-I there would be no change in the impacts to biota, land use, noise, cultural, archaeological, or historic resources, surface or groundwater, or storm water runoff from those characterized within SEA-I. Additionally, the location proposed for the RSF expansion would not result in negative aesthetic or visual impacts to the neighborhood east of Pad 1.

The expansion of RSF would, however, result in an increase in staff on the STM site to levels that SEA-I determined would lead to unacceptable traffic congestion. As

documented in the Mitigation Action Plan (MAP) (May 2008) which accompanied the Final SEA-I, to mitigate unacceptable traffic congestion DOE will implement the following:

- DOE and NREL have committed to the addition of dual eastbound right-turn lanes at the Denver West Pkwy/Denver West Blvd intersection in 2010. RSF opening without the proposed expansion is scheduled for July 2010

- DOE and NREL would actively monitor traffic conditions, volumes, and levels of service at key intersections, modify the mitigation measures applied, as necessary, such as car and vanpooling, telecommuting, flextime, offsite parking, and control of traffic exiting the STM site to prevent the unacceptable degradation of traffic flow.

DOE and NREL will be revising the MAP to address these mitigation measures and the mitigation of additional impacts of proposed actions being assessed in SEA-II.

Determination:

Based on the information provided in this SA, I have determined that no further NEPA documentation is required for the proposed expansion to the RSF that is currently being constructed at the STM site.

Issued in Golden this 30th day of July 2009.

Rita Wells

Rita Wells

Manager